SITE:	Benicia/Martinez Bridge	LATITUDE:	38-02.5
HAZARD:	Vessel Navigation	LONGITUDE:	122-07.0
VOLUME:	143,750 bbl		
DURATION:	3 days		

TRAJECTORY ANALYSIS

A spill trajectory envelope was calculated for the Benicia/Martinez Bridge vessel hazard area. The trajectory analysis considered oil transport by the wind, tidal currents, and river flow, and spreading of the oil spill by physical processes such as gravity, surface tension, and tidal dispersion. Spill transport on the flood tide would be expected to transport the oil eastward across Suisun Bay. A spill during the ebb tide would be expected to transport the oil westward into San Pablo Bay to approximately Pinole Point. Physical spreading of a 143,750 bbl spill could cause the oil to spread completely across San Pablo Bay. Spreading of this spill in Suisun Bay would carry the oil across Grizzly and Honker Bays.

Wind-induced surface currents could cause additional transport of oil depending on the direction, strength, and persistence of local winds. Northerly winds could transport the oil into San Francisco Bay as far as the West Oakland area. Oil transported south could spread westward to the Golden Gate area. Westerly and southwesterly winds could transport the oil on the flood tide across Suisun Bay to the mouths of the San Joaquin and Sacramento Rivers. Transport up these rivers would be limited by seasonal river flows.

These spill trajectory envelopes represent the outer perimeter of shoreside areas that could receive oil in the event of any spill. The envelopes are based on regional extremes of climate, tide, current, and wind and assume pessimistic dispersion and other adverse weather conditions. These trajectory envelopes do not represent the trajectory of any one spill. A full discussion of the details used for preparing these spill envelopes is provided in Section 202.2.